

Serial NO. 10/822,715

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Amendment

Responsive to Office Action dated September 10, 2007

ABSTRACT OF THE DISCLOSURE

~~The present invention provides a~~ biomagnetic measurement technique which can obtain a potential waveform corresponding to a ventricular muscle cell action potential in a non-invasive manner. The biomagnetic measurement apparatus including an operating circuit for magnetometer, The, ~~and means collecting~~ output data of the operating circuit for the magnetometer is collected and, ~~has means calculating~~ a current vector at time t is calculated, ~~means calculating~~. Further, an absolute value I_{xy} of the current vector, ~~means calculating a~~ potential waveform $V(t)$ in time corresponding to depolarization of a heart from the absolute value of the current vector, and ~~means calculating a~~ potential waveform $V(t)$ in a refractory period of the heart to a period corresponding to repolarization from the absolute value of the current vector are calculated.